8/18/03

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S-gabapentin & substance abuse

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	Feb 24	PCTGEN now available on STN
NEWS 4	Feb 24	TEMA now available on STN
NEWS 5	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 6	Feb 26	PCTFULL now contains images
NEWS 7	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 8	Mar 24	PATDPAFULL now available on STN
NEWS 9	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 10	Apr 11	Display formats in DGENE enhanced
NEWS 11	Apr 14	MEDLINE Reload
NEWS 12	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 13	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 14	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 15	Apr 28	RDISCLOSURE now available on STN
NEWS 16	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS 17	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS 18	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 19	May 19	Simultaneous left and right truncation added to WSCA
NEWS 20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS 21	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS 22	Jun 06	PASCAL enhanced with additional data
NEWS 23	Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS 24	Jun 25	HSDB has been reloaded
NEWS 25	Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS 26	Jul 21	Identification of STN records implemented
NEWS 27	Jul 21	Polymer class term count added to REGISTRY
NEWS 28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available

NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
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NEWS LOGIN	Welcome Banner and News Items
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FILE 'HOME' ENTERED AT 09:05:26 ON 30 JUL 2003

=> file registry
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

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STRUCTURE FILE UPDATES: 28 JUL 2003 HIGHEST RN 556740-18-2
DICTIONARY FILE UPDATES: 28 JUL 2003 HIGHEST RN 556740-18-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s topiramine/cn
L1 0 TOPIRAMINE/CN

=> s topiramate/cn
L2 1 TOPIRAMATE/CN

=> d l2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 97240-79-4 REGISTRY
CN .beta.-D-Fructopyranose, 2,3:4,5-bis-O-(1-methylethylidene)-, sulfamate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5H-Bis[1,3]dioxolo[4,5-b:4',5'-d]pyran, .beta.-D-fructopyranose deriv.
OTHER NAMES:
CN 2,3:4,5-Bis-O-(1-methylethylidene) .beta.-D-fructopyranose sulfamate
CN McN 4853
CN RWJ 17021
CN Topamax
CN **Topiramate**
CN Topomax
FS STEREOSEARCH
MF C12 H21 N O8 S
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU,

DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*,
SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

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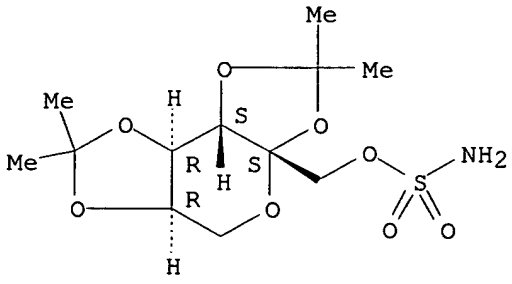

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

376 REFERENCES IN FILE CA (1947 TO DATE)
10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
381 REFERENCES IN FILE CAPLUS (1947 TO DATE)

=> file uspatfull

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	11.32	11.53

FILE 'USPATFULL' ENTERED AT 09:07:31 ON 30 JUL 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 29 Jul 2003 (20030729/PD)
FILE LAST UPDATED: 29 Jul 2003 (20030729/ED)
HIGHEST GRANTED PATENT NUMBER: US6601238
HIGHEST APPLICATION PUBLICATION NUMBER: US2003140390
CA INDEXING IS CURRENT THROUGH 29 Jul 2003 (20030729/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 29 Jul 2003 (20030729/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2003
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2003

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>>> publications, starting in 2001, for the inventions covered in <<<
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>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
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>>>  classifications, or claims, that may potentially change from      <<<
>>>  the earliest to the latest publication.                           <<<

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s 97240-79-4/rn
L3          99 97240-79-4/RN

=> s l3 and adict?
             3 ADICT?
L4           0 L3 AND ADICT?

=> s l3 and adiction
             0 ADICTION
L5           0 L3 AND ADICTION

=> s l3 and addiction
          3343 ADDICTION
L6          12 L3 AND ADDICTION

=> d l5 1-12 bib, ab, kwic
L5 HAS NO ANSWERS
L3           99 SEA FILE=USPATFULL ABB=ON  97240-79-4/RN
L5            0 SEA FILE=USPATFULL ABB=ON  L3 AND ADICTION


=> d l6 1-12 bib, ab, kwic

L6   ANSWER 1 OF 12  USPATFULL on STN
AN     2003:123417  USPATFULL
TI     Topiramate sodium trihydrate
IN     Almarsson, Orn, Shrewsbury, MA, United States
       Remenar, Jules, Framingham, MA, United States
       Peterson, Matthew L., Framingham, MA, United States
PA     Transform Pharmaceuticals, Inc., Lexington, MA, United States (U.S.
       corporation)
PI     US 6559293         B1   20030506
AI     US 2002-232589          20020903 (10)
PRAI   US 2002-406974P     20020830 (60)
       US 2002-380288P     20020515 (60)
       US 2002-356764P     20020215 (60)
DT     Utility
FS     GRANTED
EXNAM  Primary Examiner: Wilson, James O.; Assistant Examiner: McIntosh,
       Traviss C.
LREP   Pennie & Edmonds LLP
CLMN   Number of Claims: 1
ECL    Exemplary Claim: 1
DRWN   13 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 1869
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The invention encompasses novel salts of topiramate, and
       pharmaceutically acceptable polymorphs, solvates, hydrates, dehydrates,
       co-crystals, anhydrous, or amorphous forms thereof, as well as
       pharmaceutical compositions and pharmaceutical unit dosage forms
       containing the same. In particular, the invention encompasses
       pharmaceutically acceptable salts of topiramate, including without
       limitation topiramate sodium, topiramate lithium, topiramate potassium,
       or polymorphs, solvates, hydrates, dehydrates, co-crystals, anhydrous,
       and amorphous forms thereof. The invention further encompasses novel
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co-crystals or complexes of topiramate, as well as pharmaceutical compositions comprising them. The invention also encompasses methods of treating or preventing a variety of diseases and conditions including, but not limited to, seizures, epileptic conditions, tremors, cerebral function disorders, obesity, neuropathic pain, affective disorders, tobacco cessation, migraines, and cluster headache.

SUMM . . . deficit disorder with hyperactivity, compulsive or obsessive-compulsive disorder, narcolepsy, premenstrual syndrome, chronic fatigue syndrome, seasonal affective disorder, substance abuse or **addiction**, nicotine **addiction** or craving, and obesity or weight gain.

IT **97240-79-4**, Topiramate
(prepn. of topiramate sodium trihydrate as antiepileptic agents)

L6 ANSWER 2 OF 12 USPATFULL on STN
AN 2003:113100 USPATFULL
TI Diagnositc methods for determining susceptibility to convulsive conditions
IN Campbell, Allyson J., Kingston, CANADA
Weaver, Donald F., Halifax, CANADA
Lyon, Angela P., Kingston, CANADA
Carran, John R., Kingston, CANADA
PA Queen's University at Kingston, Kingston, CANADA (non-U.S. corporation)
PI US 2003077833 A1 20030424
AI US 2002-222957 A1 20020816 (10)
PRAI US 2001-318139P 20010907 (60)
US 2002-378781P 20020507 (60)
DT Utility
FS APPLICATION
LREP LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1196
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention exploits the discovery that amounts of uracil and thymine metabolites, especially .beta.-aminoisobutyric acid, in various bodily fluids, especially urine, are correlated with the occurrence of epilepsy when compared to matched control subjects. Analytical and diagnostic protocols, including a novel high performance liquid chromatography system, for use in the invention are disclosed.

DETD . . . drug or alcohol withdrawal, fever, trauma, brain tumor, cerebrovascular disease, metabolic disorder, degenerative central nervous system disease, drug or alcohol **addiction** or use, uremia, hepatic dysfunction, hypoglycemia, epilepsy, or seizure are preferred subjects for analysis according to the invention because they. . .

CLM What is claimed is:
. . . drug or alcohol withdrawal, fever, trauma, brain tumor, cerebrovascular disease, metabolic disorder, degenerative central nervous system disease, drug or alcohol **addiction** or use, uremia, hepatic dysfunction, hypoglycemia, epilepsy, or seizure; or said patient has recently been administered an antibiotic, anesthetic, analgesic,. . .

IT 50-06-6, Phenobarbital, biological studies 57-41-0, Phenytoin 77-67-8, Ethosuximide 99-66-1 125-33-7, Primidone 146-22-5, Nitrazepam 298-46-4, Carbamazepine 439-14-5, Diazepam 604-75-1, Oxazepam 846-49-1, Lorazepam 1622-61-3, Clonazepam 22316-47-8, Clobazam 25451-15-4, Felbamate 60142-96-3, Gabapentin 68291-97-4, Zonisamide 68506-86-5, Vigabatrin 84057-84-1, Lamotrigine **97240-79-4**, Topiramate 102767-28-2, Levetiracetam 115103-54-3, Tiagabine

(diagnostic methods for detg. susceptibility to convulsive conditions)

L6 ANSWER 3 OF 12 USPATFULL on STN
AN 2003:89412 USPATFULL
TI Treatment of **addiction** and **addiction**-related behavior
IN Dewey, Stephen L., Manorville, NY, United States
Brodie, Jonathan D., Cos Cob, CT, United States
Ashby, Jr., Charles R., Miller Place, NY, United States
PA Brookhaven Science Associates, Upton, NY, United States (U.S. corporation)
PI US 6541520 B1 20030401
AI US 1998-209952 19981211 (9)
RLI Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998
Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, now patented, Pat. No. US 6057368, issued on 2 May 2000
DT Utility
FS GRANTED
EXNAM Primary Examiner: Ponnaluri, Padmashri
LREP Bogosian, Margaret C.
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 2395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction**-related behavior of a mammal suffering from substance **addiction**. The method includes administering to a mammal an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. The present invention also provides a method of treatment of cocaine, morphine, heroin, nicotine, amphetamine, methamphetamine, or ethanol **addiction** by treating a mammal with an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. In one embodiment, the method of the present invention includes administering to the mammal an effective amount of a composition which increases central nervous system GABA levels wherein the effective amount is sufficient to diminish, inhibit or eliminate behavior associated with craving or use of drugs of abuse. The composition includes GVG, gabapentin, valproic acid, progabide, gamma-hydroxybutyric acid, fengabine, cetylGABA, topiramate or tiagabine or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof.
TI Treatment of **addiction** and **addiction**-related behavior
AB The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction**-related behavior of a mammal suffering from substance **addiction**. The method includes administering to a mammal an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. The present invention also provides a method of treatment of cocaine, morphine, heroin, nicotine, amphetamine, methamphetamine, or ethanol **addiction** by treating a mammal with an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. In one embodiment, . . .
SUMM This invention relates to the use of an irreversible inhibitor of GABA-transaminase for the treatment of substance **addiction** and modification of behavior associated with substance **addiction**. Substance **addiction**, such as drug abuse, and the resulting **addiction**-related behavior are enormous social and economic problems that continue to grow with devastating consequences.
SUMM Substance **addiction** can occur by use of legal and illegal substances. Nicotine, cocaine, amphetamine, methamphetamine, ethanol,

heroin, morphine and other addictive substances. . .

SUMM . . . presumptive link between cocaine's addictive liability and the DA reward/reinforcement circuitry of the forebrain, many pharmacologic strategies for treating cocaine **addiction** have been proposed.

SUMM . . . with pharmaceutical agents. There is a need for a therapy having a more desirable side effect profile, to relieve opioid **addiction** and withdrawal symptoms.

SUMM Individuals with ethanol dependence or **addiction** exhibit symptoms and physical changes including dyspepsia, nausea, bloating, esophageal varices, hemorrhoids, tremor, unsteady gait, insomnia, erectile dysfunction, decreased testicular. . .

SUMM The generally accepted treatment of ethanol **addiction** and withdrawal is accomplished by administering a mild tranquilizer such a chlordiazepoxide. Typically, vitamins, particularly the B vitamins, are also. . . nausea and hypotension. There is a need for a therapy having a more desirable side effect profile, to relieve ethanol **addiction** and withdrawal symptoms.

SUMM Accordingly, there is still a need in the treatment of **addiction** to drugs of abuse to provide new methods which can relieve a patient's craving by changing the pharmacological actions of. . .

SUMM The present invention, which addresses the needs of the prior art, provides methods for treating substance **addiction** and changing **addiction**-related behavior of a mammal, for example a primate, suffering from substance **addiction** by administering to the mammal an effective amount of a pharmaceutical composition including gamma vinylGABA (GVG). The amount of GVG. . .

SUMM In a preferred embodiment, the present invention provides a method of eliminating the effects of nicotine **addiction** by treating a mammal with an effective amount of a composition including GVG. When treating the effects of nicotine **addiction** the amount of GVG present in the pharmaceutical composition is from about 15 mg/kg to about 2 g/kg. Preferably, 75. . .

SUMM In yet another embodiment, the present invention provides a method for changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically. . .

SUMM As a result of the present invention, methods of reducing substance **addiction** and changing **addiction**-related behavior are provided which are based on a pharmaceutical composition which is not itself addictive, yet is highly effective in ameliorating the **addiction** and the addictive behavior of addicted patients. The pharmaceutical composition useful for the method of the present invention inhibits or. . .

SUMM In yet another embodiment, the invention includes a method for changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically. . .

SUMM In another exemplary embodiment of the present invention, the method includes changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of a composition that increases central nervous. . .

DETD The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction** -related behavior of mammals, for example primates, suffering from substance **addiction**.

DETD As used herein, **addiction**-related behavior means behavior resulting from compulsive substance use and is characterized by apparent total dependency on the substance. Symptomatic of. . .

DETD . . . of this drug. See Gawin and Kleber, Medical Management of

Cocaine Withdrawal, 6-8 (APT Foundation). As related to cocaine users, **addiction**-related behavior includes behavior associated with all three stages of drug effects.

DETD An effective amount as used herein is that amount effective to achieve the specified result of changing **addiction**-related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD For cocaine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about 100 mg/kg. . .

DETD For nicotine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg or from about 15 mg/kg. . .

DETD For methamphetamine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about 100 mg/kg. . .

DETD It has unexpectedly been found that intake of GVG alters behavior, and especially **addiction**-related behavior associated with the biochemical changes resulting from intake of drugs of abuse. For example, GVG significantly attenuated cocaine-induced increases. . . or on the delivery of cocaine to the brain locomotor activity. These findings suggest the possible therapeutic utility in cocaine **addiction** of a pharmacologic strategy targeted at the GABAergic neurotransmitter system, a system distinct from but functionally linked to the DA. . .

DETD . . . the mammal may be addicted to ethanol and cocaine, in which case the present invention is particularly suited for changing **addiction**-related behavior of the mammal by administering an effective amount of GVG.

DETD As previously stated, an effective amount as used herein is that amount effective to achieve the specified result of changing **addiction** -related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD . . . together, these data indicate that drugs selectively targeted at the GABAergic system can be beneficial for the treatment of cocaine **addiction**. More specifically, GVG-induced GABA-T inhibition, which produces an increase in extracellular brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine **addiction**.

DETD The phenomenon of sensitization is observed with virtually all drugs of **addiction**. Sensitization is believed to play a role in the etiology of **addiction**. In this example, the effect of saline and 150 mg/kg i.p. of GVG on the expression of cocaine-induced stereotypic behavior. . .

DETD . . . known that non-pharmacologic factors, in addition to pharmacologic ones, play a role in mediating the incentive value of drugs of **addiction** (Jarvik and Henningfield, 1988). In fact, it has been demonstrated clinically that in detoxified addicts, exposure to stimuli that were. . .

DETD . . . be inhibiting other neurotransmitters that either modulate DA directly or are themselves involved in mediating the effects of drugs of **addiction**. Further studies designed to assess the multiple effects of GVG on other neurotransmitters are ongoing.

DETD . . . extracellular brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine, nicotine, methamphetamine and ethanol **addiction**.

DETD . . . N. D., Fowler, J. S., Kushner, S. A., Brodie, J. D. (1998) A novel strategy for the treatment of cocaine **addiction**. Synapse, 30: 119-129.

DETD O'Brien, C. P., Childress, A. R., McLellan, A. T., Ehrman, R. (1992) A learning model of **addiction**,. In: Addictive States, O'Brien, C. P. and Jaffe, J. H., (eds), Raven Press, New York, pp. 157177.

DETD Wikler, A. (1965) Conditioning factors in opiate **addiction** and

relapse. In: Narcotics, Kassenbaum, G. G. and Wilner, D. I. (eds), McGraw-Hill, New York, pp. 85-100.

CLM What is claimed is:

1. A method for changing **addiction**-related behavior of a primate suffering from **addiction** to a drug of abuse selected from the group consisting of methamphetamine, morphine and heroin which comprises administering to a. . .

5. The method of claim 1, wherein said **addiction** related behavior is conditioned place preference.

6. A method for changing **addiction**-related behavior of a primate suffering from **addiction** to a drug of abuse selected from the group consisting of methamphetamine, morphine and heroin which comprises administering to a. . .

8. A method for changing **addiction**-related behavior of a mammal suffering from **addiction** to a drug of abuse selected from the group consisting of methamphetamine, morphine and heroin which comprises administering to the. . .

11. The method of claim 8, wherein said **addiction** related behavior is conditioned place preference.

12. A method for changing **addiction**-related behavior of a mammal suffer from **addiction** to a drug of abuse selected from the group consisting of methamphetamine, morphine and heroin which comprises administering to the. . .

14. A method of ameliorating effects of **addiction** to methamphetamine, morphine or heroin which comprises administering to a mammal a composition consisting of gamma vinylGABA (GVG) or a. . .

18. A method for changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administer ing to the mammal an effective amount of a composition consisting of a. . .

23. The method of claim 18, wherein said **addiction** related behavior is conditioned place preference.

24. A method for changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of a composition consisting of a racemic. . .

26. A method of ameliorating effects of psychostimulant, narcotic analgesic, or nicotine **addiction** which comprises administering to a mammal an effective amount of a compound consisting of a racemic mixture of gamma vinylGABA. . .

30. A method of changing **addiction**-related behavior of a mammal suffering from **addiction** to cocaine, nicotine, methamphetamine, morphine, or heroin which comprises administering to the mammal a compound consisting of enantiomer S(+)-gamma-vinylGABA, or. . . optionally, incorporating pharmaceutically acceptable excipients, diluents, and carriers, in an amount sufficient to diminish, inhibit or eliminate behavior associated with **addiction**.

31. A method of changing **addiction**-related behavior of a mammal suffering from **addiction** to cocaine, nicotine, methamphetamine, morphine, or heroin which comprises administering to the mammal a compound consisting of enanotiomer R(-)-gamma-vinylGABA, or. . . optionally, incorporating pharmaceutically acceptable excipients, diluents, and carriers, in an amount sufficient to diminish, inhibit or eliminate behavior associated with **addiction**.

IT 99-66-1, Valproic acid 591-81-1, .gamma.-Hydroxybutyric acid 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, .gamma. VinylGABA 74046-07-4 77162-51-7 80018-06-0,

Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of drug addiction and addiction-related behavior with .gamma. vinylGABA and related compds.)

L6 ANSWER 4 OF 12 USPATFULL on STN
AN 2003:4136 USPATFULL
TI Prevention of **addiction** in pain management
IN Dewey, Stephen L., Manorville, NY, UNITED STATES
Brodie, Jonathan D., Cos Cob, CT, UNITED STATES
Ashby, Charles R., JR., Miller Place, NY, UNITED STATES
PA Brookhaven Science Associates LLC (U.S. corporation)
PI US 2003004176 A1 20030102
AI US 2002-124660 A1 20020418 (10)
RLI Division of Ser. No. US 2001-853548, filed on 14 May 2001, PENDING
DT Utility
FS APPLICATION
LREP Margaret C. Bogosian, Patent Counsel, Brookhaven National Laboratory, Bldg. 475D, P.O. Box 5000, Upton, NY, 11973-5000
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 889
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a composition for treating pain. The composition includes a pharmaceutically acceptable analgesic and a GABAergic agent, such as gamma vinyl GABA, effective in reducing or eliminating the addictive liability of the analgesic. The invention also includes a method for reducing or eliminating the addictive
TI Prevention of **addiction** in pain management
SUMM [0002] This invention relates to the prevention of **addiction**. More specifically, the invention relates to the administration of a compound to prevent **addiction** to analgesics often administered in pain management.
SUMM . . . has long been known that exact pain control will improve the clinical outcome and be associated with little or no **addiction** liability. In a typical clinical situation, however, exact pain control is almost impossible to attain because pain generally fluctuates in. . . . the other hand, treatment with opiates in excess of that required to control the pain often leads to chronic drug **addiction** and its unfortunate clinical and social consequences. See B. Meier and M. Petersen, "Medicine Merchants/Uses and Abuses: Use of Painkiller. . .
SUMM . . . is a need to be able to administer effective, but addictive, analgesics without the unwanted side affect of developing an **addiction** to such analgesics.
SUMM . . . activity of the composition has the consequence of increasing the therapeutic index of the analgesic agent by reducing or eliminating **addiction** as a major source of post treatment morbidity. Thus, the composition enables full and continuing pain control with less concern. . .
DETD . . . the addictive liability, associated with GABA agonists acting directly at the receptor itself Thus, the GABAergic agent can eliminate the **addiction** liability of the analgesic by interfering with the process that produces craving and reward without interfering with the ability of. . .
DETD . . . reducing pain. Thus, a GABAergic agent, such as GVG used in combination with opioid analgesics will decrease the likelihood of **addiction** to the analgesic without decreasing their therapeutic effects in pain management.
IT 99-66-1, Valproic acid 99-66-1D, Valproic acid, enantiomers 591-81-1, .gamma.-Hydroxybutyric acid 591-81-1D, .gamma.-Hydroxybutyric acid, enantiomers 34562-99-7, CetylGABA 34562-99-7D, CetylGABA, enantiomers 60142-96-3, Gabapentin 60142-96-3D, Gabapentin, enantiomers

62666-20-0, Progabide 62666-20-0D, Progabide, enantiomers 68506-86-5, .gamma.-Vinyl GABA 68506-86-5D, .gamma.-Vinyl GABA, enantiomers 77337-73-6 77337-76-9, Acamprosate 77337-76-9D, Acamprosate, enantiomers 80018-06-0, Fengabine 80018-06-0D, Fengabine, enantiomers **97240-79-4**, Topiramate **97240-79-4D**, Topiramate, enantiomers 115103-54-3, Tiagabine 115103-54-3D, Tiagabine, enantiomers
(GABAergic agents for the prevention of addiction in pain management)

L6 ANSWER 5 OF 12 USPATFULL on STN
AN 2002:330311 USPATFULL
TI Prevention of **addiction** in pain management
IN Dewey, Stephen L., Manorville, NY, UNITED STATES
Brodie, Jonathan D., Cos Cob, CT, UNITED STATES
Ashby, Charles R., JR., Miller Place, NY, UNITED STATES
PI US 2002187996 A1 20021212
AI US 2001-853548 A1 20010514 (9)
DT Utility
FS APPLICATION
LREP Margaret C. Bogosian, BROOKHAVEN SCIENCE ASSOCIATES, BROOKHAVEN NATIONAL LABORATORY, BLDG. 475D-P.O. BOX 5000, UPTON, NY, 11973
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 889
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a composition for treating pain. The composition includes a pharmaceutically acceptable analgesic and a GABAergic agent, such as gamma vinyl GABA, effective in reducing or eliminating the addictive liability of the analgesic. The invention also includes a method for reducing or eliminating the addictive
TI Prevention of **addiction** in pain management
SUMM [0002] This invention relates to the prevention of **addiction**. More specifically, the invention relates to the administration of a compound to prevent **addiction** to analgesics often administered in pain management.
SUMM . . . has long been known that exact pain control will improve the clinical outcome and be associated with little or no **addiction** liability. In a typical clinical situation, however, exact pain control is almost impossible to attain because pain generally fluctuates in. . . the other hand, treatment with opiates in excess of that required to control the pain often leads to chronic drug **addiction** and its unfortunate clinical and social consequences. See B. Meier and M. Petersen, "Medicine Merchants/Uses and Abuses: Use of Painkiller. . .
SUMM . . . is a need to be able to administer effective, but addictive, analgesics without the unwanted side affect of developing an **addiction** to such analgesics.
SUMM . . . activity of the composition has the consequence of increasing the therapeutic index of the analgesic agent by reducing or eliminating **addiction** as a major source of post treatment morbidity. Thus, the composition enables full and continuing pain control with less concern. . .
DETD . . . the addictive liability associated with GABA agonists acting directly at the receptor itself. Thus, the GABAergic agent can eliminate the **addiction** liability of the analgesic by interfering with the process that produces craving and reward without interfering with the ability of. . .
DETD . . . reducing pain. Thus, a GABAergic agent, such as GVG used in combination with opioid analgesics will decrease the likelihood of **addiction** to the analgesic without decreasing their therapeutic effects in pain management.
IT 99-66-1, Valproic acid 99-66-1D, Valproic acid, enantiomers 591-81-1,

.gamma.-Hydroxybutyric acid 591-81-1D, .gamma.-Hydroxybutyric acid, enantiomers 34562-99-7, CetylGABA 34562-99-7D, CetylGABA, enantiomers 60142-96-3, Gabapentin 60142-96-3D, Gabapentin, enantiomers 62666-20-0, Progabide 62666-20-0D, Progabide, enantiomers 68506-86-5, .gamma.-Vinyl GABA 68506-86-5D, .gamma.-Vinyl GABA, enantiomers 77337-73-6 77337-76-9, Acamprosate 77337-76-9D, Acamprosate, enantiomers 80018-06-0, Fengabine 80018-06-0D, Fengabine, enantiomers **97240-79-4**, Topiramate **97240-79-4D**, Topiramate, enantiomers 115103-54-3, Tiagabine 115103-54-3D, Tiagabine, enantiomers
(GABAergic agents for the prevention of addiction in pain management)

L6 ANSWER 6 OF 12 USPATFULL on STN
AN 2002:283261 USPATFULL
TI Anticonvulsant derivatives useful in treating post traumatic stress disorder
IN Van Kammen, Daniel P., Neshanic Station, NJ, United States
PA Ortho-McNeil Pharmaceutical, Inc., Raritan, NJ, United States (U.S. corporation)
PI US 6472370 B1 20021029
AI US 1999-415720 19991012 (9)
PRAI US 1998-108805P 19981117 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Wilson, James O.; Assistant Examiner: Maier, Leigh C.
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 237
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Anticonvulsant derivatives useful in treating post traumatic stress disorder, are disclosed.
SUMM . . . is O or CH.sub.2, and R1, R2, R3, R4 and R5 are as defined hereinafter are useful in treating alcohol **addiction** and abuse.
IT **97240-79-4**, Topiramate
(anticonvulsant derivs. useful in treating post traumatic stress disorder)

L6 ANSWER 7 OF 12 USPATFULL on STN
AN 2002:122674 USPATFULL
TI Treatment of PCP **addiction** and PCP **addiction**-related behavior
IN Dewey, Stephen L., Manorville, NY, United States
Brodie, Jonathan D., Cos Cob, CT, United States
Ashby, Jr., Charles R., Miller Place, NY, United States
PA Brookhaven Science Associates, LLC, Upton, NY, United States (U.S. corporation)
PI US 6395783 B1 20020528
AI US 2000-694040 20001023 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Spivack, Phyllis G.
LREP Bogosian, Margaret C.
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 974
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for changing **addiction** -related behavior of a mammal suffering from **addiction** to phencyclidine (PCP). The method includes administering to the mammal an

effective amount of gamma vinylGABA (GVG) or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, wherein the effective amount is sufficient to diminish, inhibit or eliminate behavior associated with craving or use of PCP.

TI Treatment of PCP **addiction** and PCP **addiction**-related behavior

AB The present invention provides a method for changing **addiction**-related behavior of a mammal suffering from **addiction** to phencyclidine (PCP). The method includes administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically. . .

SUMM This invention relates to the use of an irreversible inhibitor of GABA-transaminase for the treatment of substance **addiction** and modification of behavior associated with substance **addiction**. More specifically, the invention relates to the treatment of phencyclidine **addiction** and modification of behavior associated with phencyclidine **addiction**.

SUMM There are currently no medications approved by the food and drug administration (FDA) for treating **addiction** to PCP. There are medications, however, for treating the adverse health effects of using PCP. Generally, there are two types. . . PCP user experiences delusional symptoms, hallucinations, or feels paranoid. However, such medications only treat the symptoms as opposed to the **addiction** itself.

SUMM Thus, there remains a need in the treatment of **addiction** to PCP which can relieve a patient's craving by changing the pharmacological actions of PCP in the central nervous system.

SUMM The present invention, which addresses the needs of the prior art, provides methods for treating substance **addiction** and changing **addiction**-related behavior of a mammal, for example a primate, suffering from phencyclidine (PCP) **addiction** by administering to the mammal an effective amount of a pharmaceutical composition or medicament which includes gamma vinyl GABA (GVG).. . .

SUMM In another embodiment, the present invention provides a method for changing **addiction**-related behavior of a mammal suffering from **addiction** to PCP which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof, wherein. . .

SUMM As a result of the present invention, methods of reducing PCP **addiction** and changing **addiction**-related behavior are provided which are based on a pharmaceutical composition or medicament which is not itself addictive, yet is highly effective in reducing the **addiction** and the addictive behavior of addicted patients. The pharmaceutical composition or medicament useful for the method of the present invention inhibits or eliminates craving experienced by PCP addicts. Moreover, the reduction of behavior associated with PCP **addiction** occurs in the absence of an aversive or appetitive response to GVG. Moreover, behavior characteristics associated with dependency on PCP. . .

SUMM In yet another embodiment, the invention includes a method for changing **addiction**-related behavior of a mammal suffering from **addiction** to PCP which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof, or. . .

SUMM In another exemplary embodiment of the present invention, the method includes changing **addiction**-related behavior of a mammal suffering from **addiction** to PCP which comprises administering to the mammal an effective amount of a composition or medicament that increases central nervous. . .

DETD The present invention provides a highly efficient method for treating PCP **addiction** and for changing PCP **addiction**-related behavior of primates, for example mammals.

DETD As used herein, **addiction**-related behavior means behavior

resulting from compulsive PCP use and is characterized by apparent dependency on the substance. Symptomatic of the. . .

DETD PCP **addiction** is defined herein to include PCP **addiction** together with **addiction** to other drugs of abuse. Drugs of abuse include but are not limited to psychostimulants, narcotic analgesics, alcohols and addictive. . .

DETD An effective amount as used herein is that amount effective to achieve the specified result of changing **addiction**-related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD Preferably, GVG is administered in an amount which has little or no adverse effects. For example, to treat PCP **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about 100 mg/kg. . .

DETD These findings suggest the possible therapeutic utility in PCP **addiction** of a pharmacologic strategy targeted at the GABAergic neurotransmitter system, a system distinct from but functionally linked to the DA. . .

DETD As previously stated, an effective amount as used herein is that amount effective to achieve the specified result of changing **addiction** -related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD Thus, drugs that selectively target the GABAergic system can be beneficial for the treatment of PCP **addiction**. More specifically, GVG-induced GABA-T inhibition, which produces an increase in extracellular brain GABA levels, represents an effective drug and novel strategy for the treatment of PCP **addiction**.

DETD . . . N. D., Fowler, J. S., Kushner, S. A., Brodie, J. D. (1998) A novel strategy for the treatment of cocaine **addiction**. Synapse, 30: 119-129.

DETD O'Brien, C. P., Childress, A. R., McLellan, A. T., Ehrman, R. (1992) A learning model of **addiction**,. In: Addictive States, O'Brien, C. P. and Jaffe, J. H., (eds), Raven Press, New York, pp. 157-177.

DETD Wikler, A. (1965) Conditioning factors in opiate **addiction** and relapse. In: Narcotics, Kassenbaum, G. G. and Wilner, D. I. (eds), McGraw-Hill, New York, pp. 85-100.

CLM What is claimed is:

1. A method for changing **addiction**-related behavior of a mammal suffering from PCP **addiction** which comprises administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically acceptable salt thereof, or. . .

4. The method of claim 1, wherein said **addiction** related behavior is conditioned place preference.

6. A method for changing **addiction**-related behavior of a mammal suffering from PCP **addiction** which comprises administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically acceptable salt thereof, or. . .

9. A method of ameliorating effects of PCP **addiction** which comprises administering to a mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically acceptable salt thereof, or. . .

14. A method for changing **addiction**-related behavior of a mammal suffering from PCP **addiction** which comprises administering to the mammal an effective amount of gabapentin, wherein the effective amount is sufficient to diminish, inhibit. . .

16. A method for changing **addiction**-related behavior of a mammal suffering from PCP **addiction** which comprises administering to the mammal an effective amount of topirimate, wherein the effective amount is sufficient to diminish, inhibit. . .

18. A method for changing **addiction**-related behavior of a mammal suffering from PCP **addiction** which comprises administering to the mammal an effective amount of progabide, wherein

the effective amount is sufficient to diminish, inhibit. . .
20. A method for changing **addiction**-related behavior of a mammal suffering from PCP **addiction** which comprises administering to the mammal an effective amount of fengabine, wherein the effective amount is sufficient to diminish, inhibit. . .
22. A method for changing **addiction**-related behavior of a mammal suffering from PCP **addiction** which comprises administering to the mammal an effective amount of gamma-hydroxybutyric acid, wherein the effective amount is sufficient to diminish,. . .
24. A method of ameliorating effects of PCP **addiction** which comprises administering to a mammal an effective amount of gabapentin, wherein the effective amount is sufficient to reduce PCP. . .
26. A method of ameliorating effects of PCP **addiction** which comprises administering to a mammal an effective amount of topiramate, wherein the effective amount is sufficient to reduce PCP. . .
28. A method of ameliorating effects of PCP **addiction** which comprises administering to a mammal an effective amount of progabide, wherein the effective amount is sufficient to reduce PCP. . .
30. A method of ameliorating effects of PCP **addiction** which comprises administering to a mammal an effective amount of fengabine, wherein the effective amount is sufficient to reduce PCP. . .
32. A method of ameliorating effects of PCP **addiction** which comprises administering to a mammal an effective amount of gamma-hydroxybutyric acid, wherein the effective amount is sufficient to reduce. . .

IT 99-66-1, Valproic acid 591-81-1, .gamma.-Hydroxybutyric acid 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, .gamma.-VinylGABA 77337-76-9, Acamprosate 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of PCP addiction and PCP addiction-related behavior)

L6 ANSWER 8 OF 12 USPATFULL on STN
AN 2002:78788 USPATFULL
TI Treatment of **addiction** and **addiction**-related behavior
IN Dewey, Stephen L., Manorville, NY, UNITED STATES
Brodie, Jonathan D., Cos Cob, CT, UNITED STATES
Ashby,, Charles R., JR., Miller Place, NY, UNITED STATES
PI US 2002042446 A1 20020411
AI US 2001-933157 A1 20010820 (9)
RLI Continuation-in-part of Ser. No. US 2001-776117, filed on 2 Feb 2001, PENDING Continuation-in-part of Ser. No. US 1998-209952, filed on 11 Dec 1998, PENDING Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998, PENDING Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, GRANTED, Pat. No. US 6057368
DT Utility
FS APPLICATION
LREP Margaret C. Bogosian, Brookhaven National Laboratory, Bldg. 475D, P.O. Box 5000, Upton, NY, 11973-5000
CLMN Number of Claims: 96
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 3009
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the use of a composition that increases central nervous system GABA levels in a mammal, for the treatment of **addiction** to drugs of abuse and modification of behavior associated with **addiction** to drugs of abuse in said mammal.
TI Treatment of **addiction** and **addiction**-related behavior
AB . . . to the use of a composition that increases central nervous system GABA levels in a mammal, for the treatment of **addiction**

to drugs of abuse and modification of behavior associated with **addiction** to drugs of abuse in said mammal.

SUMM [0003] This invention relates to the use of an irreversible inhibitor of GABA-transaminase for the treatment of substance **addiction** and modification of behavior associated with substance **addiction**. Substance **addiction**, such as drug abuse, and the resulting **addiction**-related behaviors are enormous social and economic problems that continue to grow with devastating consequences.

SUMM [0006] Substance **addiction** can occur by use of legal and illegal substances. Nicotine, cocaine, amphetamine, methamphetamine, ethanol, heroin, morphine, phencyclidine (PCP), methylenedioxymethamphetamine (MDMA),. . .

SUMM . . . presumptive link between cocaine's addictive liability and the DA reward/reinforcement circuitry of the forebrain, many pharmacologic strategies for treating cocaine **addiction** have been proposed.

SUMM . . . with pharmaceutical agents. There is a need for a therapy having a more desirable side effect profile, to relieve opioid **addiction** and withdrawal symptoms.

SUMM [0028] Individuals with ethanol dependence or **addiction** exhibit symptoms and physical changes including dyspepsia, nausea, bloating, esophageal varices, hemorrhoids, tremor, unsteady gait, insomnia, erectile dysfunction, decreased testicular. . .

SUMM [0029] The generally accepted treatment of ethanol **addiction** and withdrawal is accomplished by administering a mild tranquilizer such a chlordiazepoxide. Typically, vitamins, particularly the B vitamins, are also. . . nausea and hypotension. There is a need for a therapy having a more desirable side effect profile, to relieve ethanol **addiction** and withdrawal symptoms.

SUMM [0038] MDMA users may encounter problems similar to those of amphetamine and cocaine users, which includes **addiction**. In addition, MDMA can cause confusion, depression, sleep problems, anxiety, and paranoia. Physical effects of MDMA use include muscle tension,. . .

SUMM [0040] Accordingly, there is a need in the treatment of **addiction** to drugs of abuse to provide new methods which can relieve a patient's craving by changing the pharmacological actions of. . .

SUMM [0041] The present invention, which addresses the needs of the prior art, provides methods for treating **addiction** to drugs of abuse. Also provided are methods for diminishing, inhibiting or eliminating **addiction**-related behavior of a mammal, for example a primate, suffering from **addiction** to drugs of abuse by administering to the mammal an effective amount of a pharmaceutical composition or medicament that increases. . .

SUMM [0044] In a preferred embodiment, the present invention provides a method for diminishing, inhibiting or eliminating **addiction** -related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of topiramate (available as Topomax.RTM.) or a pharmaceutically acceptable salt thereof or an enantiomer or racemic mixture thereof, to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM . . . provides a method for diminishing, inhibiting or eliminating the rewarding/incentive effects of drugs of abuse in a mammal suffering from **addiction** to drugs which comprises administering to the mammal an effective amount of topiramate or a pharmaceutically acceptable salt thereof or. . .

SUMM [0046] In a preferred embodiment, the present invention provides a method for diminishing, inhibiting or eliminating **addiction** -related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM . . . provides a method for diminishing, inhibiting or eliminating the rewarding/incentive effects of drugs of abuse in a mammal suffering from **addiction** to drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof to. . .

SUMM [0051] As a result of the present invention, methods of diminishing, inhibiting or eliminating **addiction** to drugs of abuse and diminishing, inhibiting or eliminating **addiction**-related behavior are provided which are based on a pharmaceutical composition or medicament which is not itself addictive, yet is highly effective in diminishing, inhibiting or eliminating **addiction** and **addiction**-related behavior of addicted mammals.

SUMM . . . the present invention diminishes, inhibits, or eliminates the cravings for drugs of abuse that are experienced by mammal suffering from **addiction** to drugs of abuse.

SUMM [0053] Moreover, the methods provided by the present invention diminish, inhibit or eliminate **addiction**-related behavior associated with drugs of abuse in the absence of an aversive or appetitive response to the composition administered.

SUMM [0054] In addition, the methods provided by the present invention diminish, inhibit or eliminate **addiction**-related behavior associated with drugs of abuse in the absence of an alteration in the locomotor function of the mammal.

SUMM [0055] In yet another embodiment, the present invention includes a method for diminishing, inhibiting or eliminating cravings associated with **addiction** to drugs of abuse, which comprises administering to a mammal suffering from **addiction** to drugs of abuse, an amount of GVG or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, effectively diminishes, inhibits or eliminates said cravings associated with **addiction** to drugs of abuse.

SUMM [0056] In yet another embodiment, the present invention includes a method for diminishing, inhibiting or eliminating cravings associated with **addiction** to drugs of abuse, which comprises administering to a mammal suffering from **addiction** to drugs of abuse, an amount of Topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, effectively diminishes, inhibits or eliminates said cravings associated with **addiction** to drugs of abuse.

SUMM [0057] In another exemplary embodiment of the present invention, the method includes diminishing, inhibiting or eliminating **addiction** -related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of a composition or medicament that increases central nervous system GABA levels wherein the effective amount is sufficient to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM . . . the method includes diminishing, inhibiting or eliminating cravings associated with use of drugs of abuse in a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of a composition or medicament that increases. . .

SUMM [0059] In yet another exemplary embodiment, the present invention provides a method for diminishing, inhibiting or eliminating **addiction**-related behavior of a mammal suffering from **addiction** to a combination of abused drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically. . . or an enantiomer or a racemic mixture thereof, wherein the effective amount is sufficient to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM [0060] In yet another exemplary embodiment, the present invention provides a method for diminishing, inhibiting or eliminating

addiction-related behavior of a mammal suffering from **addiction** to a combination of abused drugs which comprises administering to the mammal an effective amount of Topiramate or a pharmaceutically. . . or an enantiomer or a racemic mixture thereof, wherein the effective amount is sufficient to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM [0061] In another embodiment, the present invention provides a method for treating a mammal suffering from **addiction** to abused drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof,. . .

SUMM [0062] In another embodiment, the present invention provides a method for treating a mammal suffering from **addiction** to abused drugs which comprises administering to the mammal an effective amount of Topiramate or a pharmaceutically acceptable salt thereof,. . .

SUMM [0063] In yet another embodiment, the present invention provides a method for preventing **addiction** to abused drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof,. . .

SUMM [0064] In yet another embodiment, the present invention provides a method for preventing **addiction** to abused drugs which comprises administering to the mammal an effective amount of Topiramate or a pharmaceutically acceptable salt thereof,. . .

DETD [0080] Substance **Addiction**

DETD [0081] The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction**-related behavior of mammals, for example primates, suffering from substance **addiction**. In the present invention, substance **addiction** means dependency on drugs of abuse.

DETD . . . are defined as any substance that is consumed by a mammal and as result of said consumption, said mammal experiences **addiction** related behavior, cravings for the substance, rewarding/incentive effects, and dependency characteristics, or any combination thereof.

DETD [0088] **Addiction**-Related Behavior

DETD [0089] As used herein, **addiction**-related behavior means behavior resulting from compulsive substance use and is characterized by apparent total dependency on the substance. Symptomatic of. . .

DETD [0091] As related to cocaine users, **addiction**-related behavior includes behavior associated with all three stages of effects when using the substance cocaine.

DETD . . . addicted to ethanol and cocaine, in which case the present invention is particularly suited for diminishing, inhibiting or eliminating the **addiction**-related behavior of the mammal. This can be accomplished by administering an effective amount of GVG or Topiramate or a combination. . .

DETD . . . spent in the presence of the drug-associated stimuli relative to vehicle-injected control animals. It can also be used to assess **addiction** to a combination of abused drugs.

DETD . . . An effective amount as used herein is that amount effective to achieve the specified result of diminishing, inhibiting or eliminating **addiction**-related behavior, dependency characteristics, rewarding/incentive effects and cravings associated with drugs of abuse or combinations of drugs of abuse, of a. . .

DETD [0133] An effective amount as used herein is that amount effective to prevent **addiction** to drugs of abuse. It is an amount that will diminish or relieve one or more symptoms or conditions resulting. . .

DETD [0135] For example, to treat cocaine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about 100 mg/kg. . .

DETD [0136] To treat nicotine **addiction**, for example, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg or from about. . .

DETD [0137] To treat methamphetamine **addiction**, for example, GVG is

administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about. . .

DETD [0142] It has unexpectedly been found that intake of GVG alters behavior, and especially **addiction**-related behavior associated with the biochemical changes resulting from intake of drugs of abuse. For example, GVG significantly attenuated cocaine-induced increases. . .

DETD [0143] These findings suggest the possible therapeutic utility in cocaine **addiction** of a pharmacologic strategy targeted at the GABAergic neurotransmitter system, a system distinct from but functionally linked to the DA. . .

DETD [0158] An effective amount of Topiramate as used herein is that amount effective to achieve the specified result of changing **addiction** -related behavior of the mammal. It is an amount which will diminish, inhibit or eliminate one or more symptoms or conditions. . .

DETD [0162] An effective amount as used herein is that amount effective to achieve the specified result of changing **addiction**-related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD . . . together, these data indicate that drugs selectively targeted at the GABAergic system can be beneficial for the treatment of cocaine **addiction**. More specifically, GVG-induced GABA-T inhibition, which produces an increase in extracellular brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine **addiction**.

DETD [0224] The phenomenon of sensitization is observed with virtually all drugs of **addiction**. Sensitization is believed to play a role in the etiology of **addiction**. In this example, the effect of saline and 150 mg/kg i.p. of GVG on the expression of cocaine-induced stereotypic behavior. . .

DETD . . . known that non-pharmacologic factors, in addition to pharmacologic ones, play a role in mediating the incentive value of drugs of **addiction** (Jarvik and Henningfield, 1988). In fact, it has been demonstrated clinically that in detoxified addicts, exposure to stimuli that were. . .

DETD . . . be inhibiting other neurotransmitters that either modulate DA directly or are themselves involved in mediating the effects of drugs of **addiction**. Further studies designed to assess the multiple effects of GVG on other neurotransmitters are ongoing.

DETD . . . brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine, nicotine, heroin, methamphetamine and ethanol **addiction**.

DETD . . . N. D., Fowler, J. S., Kushner, S. A., Brodie, J. D. (1998) A novel strategy for the treatment of cocaine **addiction**. Synapse, 30: 119-129.

DETD [0348] O'Brien, C. P., Childress, A. R., McLellan, A. T., Ehrman, R. (1992) A learning model of **addiction**,. In: Addictive States, O'Brien, C. P. and Jaffe, J. H., (eds), Raven Press, New York, pp. 157177.

DETD [0361] Wikler, A. (1965) Conditioning factors in opiate **addiction** and relapse. In: Narcotics, Kassenbaum, G. G. and Wilner, D. I. (eds), McGraw-Hill, New York, pp. 85-100.

CLM What is claimed is:

1. A method for diminishing, inhibiting or eliminating **addiction** -related behavior of a mammal, wherein said method comprises administering to said mammal an effective amount of a composition that increases. . .

2. A method according to claim 1, wherein said **addiction** -related behavior is diminished, inhibited or eliminated without an aversive response to said composition.

3. A method according to claim I, wherein said **addiction**

-related behavior is diminished, inhibited or eliminated without an appetitive response to said composition.

4. A method according to claim 1, wherein said **addiction** -related behavior is diminished, inhibited or eliminated without an alteration in locomotor function of said mammal.

6. A method according to claim 1, wherein said **addiction** related behavior is conditioned place preference.

17. A method for diminishing, inhibiting or eliminating cravings associated with **addiction** to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a. . .
47. A method for diminishing, inhibiting or eliminating dependency characteristics associated with **addiction** to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a. . .
62. A method for preventing **addiction** to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a. . .
63. A method according to claim 62, wherein said **addiction** is prevented without an aversive response to said composition.

64. A method according to claim 62, wherein said **addiction** is prevented without an appetitive response to said composition.

65. A method according to claim 62, wherein said **addiction** is prevented without an alteration in locomotor function of said mammal.

77. A method for treating **addiction** to cocaine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
79. A method for treating **addiction** to nicotine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
81. A method for treating **addiction** to morphine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
83. A method for treating **addiction** to methamphetamine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
85. A method for treating **addiction** to alcohol in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
87. A method for treating **addiction** to phencyclidine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
89. A method for treating **addiction** to methylenedioxymethamphetamine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
91. A method of treating **addiction** to a combination of drugs of abuse in a mammal, wherein said method comprises administering an effective amount of topiramate. . .

IT 68506-86-5, .gamma.-VinylGABA **97240-79-4**, Topiramate
(treatment of addiction and addiction-related behavior with agents increasing central nervous system GABA levels)

L6 ANSWER 9 OF 12 USPATFULL on STN
AN 2002:67272 USPATFULL
TI Treatment of **addiction** and **addiction**-related

behavior
IN Dewey, Stephen L., Manorville, NY, UNITED STATES
Brodie, Jonathan D., Cos Cob, CT, UNITED STATES
Ashby, Charles R., JR., Miller Place, NY, UNITED STATES
PI US 2002037925 A1 20020328
AI US 2001-776117 A1 20010202 (9)
RLI Continuation-in-part of Ser. No. US 1998-209952, filed on 11 Dec 1998, PENDING Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998, PENDING Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, GRANTED, Pat. No. US 6057368
DT Utility
FS APPLICATION
LREP Margaret C. Bogosian, Brookhaven National Laboratory, Bldg. 475D, P.O. Box 5000, Upton, NY, 11973-5000
CLMN Number of Claims: 96
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 2728
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the use of a composition that increases central nervous system GABA levels in a mammal, for the treatment of **addiction** to drugs of abuse and modification of behavior associated with **addiction** to drugs of abuse in said mammal.
TI Treatment of **addiction** and **addiction**-related behavior
AB . . . to the use of a composition that increases central nervous system GABA levels in a mammal, for the treatment of **addiction** to drugs of abuse and modification of behavior associated with **addiction** to drugs of abuse in said mammal.
SUMM [0003] This invention relates to the use of an irreversible inhibitor of GABA-transaminase for the treatment of substance **addiction** and modification of behavior associated with substance **addiction**. Substance **addiction**, such as drug abuse, and the resulting **addiction**-related behaviors are enormous social and economic problems that continue to grow with devastating consequences.
SUMM [0006] Substance **addiction** can occur by use of legal and illegal substances. Nicotine, cocaine, amphetamine, methamphetamine, ethanol, heroin, morphine, phencyclidine (PCP), methylenedioxymethamphetamine (MDMA),. . .
SUMM . . . presumptive link between cocaine's addictive liability and the DA reward/reinforcement circuitry of the forebrain, many pharmacologic strategies for treating cocaine **addiction** have been proposed.
SUMM . . . with pharmaceutical agents. There is a need for a therapy having a more desirable side effect profile, to relieve opioid **addiction** and withdrawal symptoms.
SUMM [0028] Individuals with ethanol dependence or **addiction** exhibit symptoms and physical changes including dyspepsia, nausea, bloating, esophageal varices, hemorrhoids, tremor, unsteady gait, insomnia, erectile dysfunction, decreased testicular. . .
SUMM [0029] The generally accepted treatment of ethanol **addiction** and withdrawal is accomplished by administering a mild tranquilizer such a chlordiazepoxide. Typically, vitamins, particularly the B vitamins, are also. . . nausea and hypotension. There is a need for a therapy having a more desirable side effect profile, to relieve ethanol **addiction** and withdrawal symptoms.
SUMM [0038] MDMA users may encounter problems similar to those of amphetamine and cocaine users, which includes **addiction**. In addition, MDMA can cause confusion, depression, sleep problems, anxiety, and paranoia. Physical effects of MDMA use include muscle tension,. . .
SUMM [0040] Accordingly, there is a need in the treatment of **addiction** to drugs of abuse to provide new methods which can relieve a patient's craving by changing the pharmacological actions of.

. .

SUMM [0041] The present invention, which addresses the needs of the prior art, provides methods for treating **addiction** to drugs of abuse. Also provided are methods for diminishing, inhibiting or eliminating **addiction**-related behavior of a mammal, for example a primate, suffering from **addiction** to drugs of abuse by administering to the mammal an effective amount of a pharmaceutical composition or medicament that increases. . .

SUMM [0044] In a preferred embodiment, the present invention provides a method for diminishing, inhibiting or eliminating **addiction** -related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of topiramate (available as Topomaxe) or a pharmaceutically acceptable salt thereof or an enantiomer or racemic mixture thereof, to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM . . . provides a method for diminishing, inhibiting or eliminating the rewarding/incentive effects of drugs of abuse in a mammal suffering from **addiction** to drugs which comprises administering to the mammal an effective amount of topiramate or a pharmaceutically acceptable salt thereof or. . .

SUMM [0046] In a preferred embodiment, the present invention provides a method for diminishing, inhibiting or eliminating **addiction** -related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM . . . provides a method for diminishing, inhibiting or eliminating the rewarding/incentive effects of drugs of abuse in a mammal suffering from **addiction** to drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof to. . .

SUMM [0050] As a result of the present invention, methods of diminishing, inhibiting or eliminating **addiction** to drugs of abuse and diminishing, inhibiting or eliminating **addiction**-related behavior are provided which are based on a pharmaceutical composition or medicament which is not itself addictive, yet is highly effective in diminishing, inhibiting or eliminating **addiction** and **addiction**-related behavior of addicted mammals.

SUMM . . . the present invention diminishes, inhibits, or eliminates the cravings for drugs of abuse that are experienced by mammal suffering from **addiction** to drugs of abuse.

SUMM [0052] Moreover, the methods provided by the present invention diminish, inhibit or eliminate **addiction**-related behavior associated with drugs of abuse in the absence of an aversive or appetitive response to the composition administered.

SUMM [0053] In addition, the methods provided by the present invention diminish, inhibit or eliminate **addiction**-related behavior associated with drugs of abuse in the absence of an alteration in the locomotor function of the mammal.

SUMM [0054] In yet another embodiment, the present invention includes a method for diminishing, inhibiting or eliminating cravings associated with **addiction** to drugs of abuse, which comprises administering to a mammal suffering from **addiction** to drugs of abuse, an amount of GVG or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, effectively diminishes, inhibits or eliminates said cravings associated with **addiction** to drugs of abuse.

SUMM [0055] In yet another embodiment, the present invention includes a method for diminishing, inhibiting or eliminating cravings associated with **addiction** to drugs of abuse, which comprises administering to a mammal suffering from **addiction** to drugs of

abuse, an amount of Topiramate or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, effectively diminishes, inhibits or eliminates said cravings associated with **addiction** to drugs of abuse.

SUMM [0056] In another exemplary embodiment of the present invention, the method includes diminishing, inhibiting or eliminating **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of a composition or medicament that increases central nervous system GABA levels wherein the effective amount is sufficient to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM . . . the method includes diminishing, inhibiting or eliminating cravings associated with use of drugs of abuse in a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of a composition or medicament that increases. . .

SUMM [0058] In yet another exemplary embodiment, the present invention provides a method for diminishing, inhibiting or eliminating **addiction**-related behavior of a mammal suffering from **addiction** to a combination of abused drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically. . . or an enantiomer or a racemic mixture thereof, wherein the effective amount is sufficient to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM [0059] In yet another exemplary embodiment, the present invention provides a method for diminishing, inhibiting or eliminating **addiction**-related behavior of a mammal suffering from **addiction** to a combination of abused drugs which comprises administering to the mammal an effective amount of Topiramate or a pharmaceutically. . . or an enantiomer or a racemic mixture thereof, wherein the effective amount is sufficient to diminish, inhibit or eliminate said **addiction**-related behavior.

SUMM [0060] In another embodiment, the present invention provides a method for treating a mammal suffering from **addiction** to abused drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof,. . .

SUMM [0061] In another embodiment, the present invention provides a method for treating a mammal suffering from **addiction** to abused drugs which comprises administering to the mammal an effective amount of Topiramate or a pharmaceutically acceptable salt thereof,. . .

SUMM [0062] In yet another embodiment, the present invention provides a method for preventing **addiction** to abused drugs which comprises administering to the mammal an effective amount of GVG or a pharmaceutically acceptable salt thereof,. . .

SUMM [0063] In yet another embodiment, the present invention provides a method for preventing **addiction** to abused drugs which comprises administering to the mammal an effective amount of Topiramate or a pharmaceutically acceptable salt thereof,. . .

DETD [0077] Substance **Addiction**

DETD [0078] The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction**-related behavior of mammals, for example primates, suffering from substance **addiction**. In the present invention, substance **addiction** means dependency on drugs of abuse.

DETD . . . are defined as any substance that is consumed by a mammal and as result of said consumption, said mammal experiences **addiction** related behavior, cravings for the substance, rewarding/incentive effects, and dependency characteristics, or any combination thereof.

DETD [0085] **Addiction**-Related Behavior

DETD [0086] As used herein, **addiction**-related behavior means behavior resulting from compulsive substance use and is characterized by

apparent total dependency on the substance. Symptomatic of. . .

DETD [0088] As related to cocaine users, **addiction**-related behavior includes behavior associated with all three stages of effects when using the substance cocaine.

DETD . . . addicted to ethanol and cocaine, in which case the present invention is particularly suited for diminishing, inhibiting or eliminating the **addiction**-related behavior of the mammal. This can be accomplished by administering an effective amount of GVG or Topiramate or a combination. . .

DETD . . . spent in the presence of the drug-associated stimuli relative to vehicle-injected control animals. It can also be used to assess **addiction** to a combination of abused drugs.

DETD . . . An effective amount as used herein is that amount effective to achieve the specified result of diminishing, inhibiting or eliminating **addiction**-related behavior, dependency characteristics, rewarding/incentive effects and cravings associated with drugs of abuse or combinations of drugs of abuse, of a. . .

DETD [0132] An effective amount as used herein is that amount effective to prevent **addiction** to drugs of abuse. It is an amount that will diminish or relieve one or more symptoms or conditions resulting. . .

DETD [0134] For example, to treat cocaine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about 100 mg/kg. . .

DETD [0135] To treat nicotine **addiction**, for example, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg or from about. . .

DETD [0136] To treat methamphetamine **addiction**, for example, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about. . .

DETD [0141] It has unexpectedly been found that intake of GVG alters behavior, and especially **addiction**-related behavior associated with the biochemical changes resulting from intake of drugs of abuse. For example, GVG significantly attenuated cocaine-induced increases. . .

DETD [0142] These findings suggest the possible therapeutic utility in cocaine **addiction** of a pharmacologic strategy targeted at the GABAergic neurotransmitter system, a system distinct from but functionally linked to the DA. . .

DETD [0158] An effective amount of Topiramate as used herein is that amount effective to achieve the specified result of changing **addiction** -related behavior of the mammal. It is an amount which will diminish, inhibit or eliminate one or more symptoms or conditions. . .

DETD [0162] An effective amount as used herein is that amount effective to achieve the specified result of changing **addiction**-related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD . . . together, these data indicate that drugs selectively targeted at the GABAergic system can be beneficial for the treatment of cocaine **addiction**. More specifically, GVG-induced GABA-T inhibition, which produces an increase in extracellular brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine **addiction**.

DETD [0224] The phenomenon of sensitization is observed with virtually all drugs of **addiction**. Sensitization is believed to play a role in the etiology of **addiction**. In this example, the effect of saline and 150 mg/kg i.p. of GVG on the expression of cocaine-induced stereotypic behavior. . .

DETD . . . known that non-pharmacologic factors, in addition to pharmacologic ones, play a role in mediating the incentive value of drugs of **addiction** (Jarvik and Henningfield, 1988). In fact, it has been demonstrated clinically that in detoxified addicts, exposure to stimuli that were. . .

DETD . . . be inhibiting other neurotransmitters that either modulate DA directly or are themselves involved in mediating the effects of drugs of **addiction**. Further studies designed to assess the multiple effects of GVG on other neurotransmitters are ongoing.

DETD . . . brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine, nicotine, heroin, methamphetamine and ethanol **addiction**.

CLM What is claimed is:

1. A method for diminishing, inhibiting or eliminating **addiction** -related behavior of a mammal, wherein said method comprises administering to said mammal an effective amount of a composition that increases. . .

2. A method according to claim 1, wherein said **addiction** -related behavior is diminished, inhibited or eliminated without an aversive response to said composition.

3. A method according to claim 1, wherein said **addiction** -related behavior is diminished, inhibited or eliminated without an appetitive response to said composition.

4. A method according to claim 1, wherein said **addiction** -related behavior is diminished, inhibited or eliminated without an alteration in locomotor function of said mammal.

6. A method according to claim 1, wherein said **addiction** related behavior is conditioned place preference.

17. A method for diminishing, inhibiting or eliminating cravings associated with **addiction** to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a. . .

47. A method for diminishing, inhibiting or eliminating dependency characteristics associated with **addiction** to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a. . .

62. A method for preventing **addiction** to drugs of abuse in a mammal, wherein said method comprises administering to said mammal an effective amount of a. . .

63. A method according to claim 62, wherein said **addiction** is prevented without an aversive response to said composition.

64. A method according to claim 62, wherein said **addiction** is prevented without an appetitive response to said composition.

65. A method according to claim 62, wherein said **addiction** is prevented without an alteration in locomotor function of said mammal.

77. A method for treating **addiction** to cocaine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .

79. A method for treating **addiction** to nicotine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .

81. A method for treating **addiction** to morphine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .

83. A method for treating **addiction** to methamphetamine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .

85. A method for treating **addiction** to alcohol in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .

87. method for treating **addiction** to phencyclidine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
89. A method for treating **addiction** to methylenedioxymethamphetamine in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .
91. A method of treating **addiction** to a combination of drugs of abuse in a mammal, wherein said method comprises administering an effective amount of topiramate. . .
95. A method for treating **addiction** to heroin in a mammal, wherein said method comprises administering an effective amount of topiramate or a pharmaceutically acceptable salt. . .

IT 99-66-1, Valproic Acid 591-81-1, .gamma.-Hydroxybutyric acid 1134-47-0, Baclofen 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, Vigabatrin 77337-76-9, Acamprosate 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of drug addiction and addiction-related behavior using compns. that increase central nervous system GABA in relation to effect on nucleus accumbens dopamine)

L6 ANSWER 10 OF 12 USPATFULL on STN
AN 2001:215084 USPATFULL
TI Treatment of **addiction** to ethanol and addictive-related behavior
IN Dewey, Stephen L., Manorville, NY, United States
Brodie, Jonathan D., Cos Cob, CT, United States
Ashby, Jr., Charles R., Miller Place, NY, United States
PA Brookhaven Science Associates, Upton, NY, United States (U.S. corporation)
PI US 6323239 B1 20011127
AI US 2000-635578 20000809 (9)
RLI Continuation of Ser. No. US 1998-209952, filed on 11 Dec 1998
Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998
Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, now patented, Pat. No. US 6057368, issued on 2 May 2000
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jarvis, William R. A.
LREP Bogosian, Margaret C.
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 2326
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a highly efficient method for treating alcohol **addiction** and for changing **addiction**-related behavior of a mammal suffering from alcohol **addiction**. The method includes administering to a mammal an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. In one embodiment, the method of the present invention includes administering to the mammal an effective amount of a composition which increase central nervous system GABA levels wherein the effective amount is sufficient to diminish, inhibit or eliminate behavior associated with craving or use of alcohol.
TI Treatment of **addiction** to ethanol and addictive-related behavior
AB The present invention provides a highly efficient method for treating alcohol **addiction** and for changing **addiction**-related behavior of a mammal suffering from alcohol **addiction**. The method includes administering to a mammal an effective amount of gamma

vinylGABA or a pharmaceutically acceptable salt thereof. In. . .

SUMM This invention relates to the use of an irreversible inhibitor of GABA-transaminase for the treatment of substance **addiction** and modification of behavior associated with substance **addiction**. Substance **addiction**, such as drug abuse, and the resulting **addiction**-related behavior are enormous social and economic problems that continue to grow with devastating consequences.

SUMM Substance **addiction** can occur by use of legal and illegal substances. Nicotine, cocaine, amphetamine, methamphetamine, ethanol, heroin, morphine and other addictive substances. . .

SUMM . . . presumptive link between cocaine's addictive liability and the DA reward/reinforcement circuitry of the forebrain, many pharmacologic strategies for treating cocaine **addiction** have been proposed.

SUMM . . . with pharmaceutical agents. There is a need for a therapy having a more desirable side effect profile, to relieve opioid **addiction** and withdrawal symptoms.

SUMM Individuals with ethanol dependence or **addiction** exhibit symptoms and physical changes including dyspepsia, nausea, bloating, esophageal varices, hemorrhoids, tremor, unsteady gait, insomnia, erectile dysfunction, decreased testicular. . .

SUMM The generally accepted treatment of ethanol **addiction** and withdrawal is accomplished by administering a mild tranquilizer such a chlordiaznepoide. Typically, vitamins, particularly the B vitamins, are also. . . nausea and hypotension. There is a need for a therapy having a more desirable side effect profile, to relieve ethanol **addiction** and withdrawal symptoms.

SUMM Accordingly, there is still a need in the treatment of **addiction** to drugs of abuse to provide new methods which can relieve a patient's craving by changing the pharmacological actions of. . .

SUMM The present invention, which addresses the needs of the prior art, provides methods for treating substance **addiction** and changing **addiction**-related behavior of a mammal, for example a primate, suffering from substance **addiction** by administering to the mammal an effective amount of a pharmaceutical composition including gamma vinylGABA (GVG). The amount of GVG. . .

SUMM In a preferred embodiment, the present invention provides a method of eliminating the effects of nicotine **addiction** by treating a mammal with an effective amount of a composition including GVG. When treating the effects of nicotine **addiction** the amount of GVG present in the pharmaceutical composition is from about 15 mg/kg to about 2 g/kg. Preferably, 75. . .

SUMM In yet another embodiment, the present invention provides a method for changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically. . .

SUMM As a result of the present invention, methods of reducing substance **addiction** and changing **addiction**-related behavior are provided which are based on a pharmaceutical composition which is not itself addictive, yet is highly effective in ameliorating the **addiction** and the addictive behavior of addicted patients. The pharmaceutical composition useful for the method of the present invention inhibits or. . .

SUMM In yet another embodiment, the invention includes a method for changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically. . .

SUMM In another exemplary embodiment of the present invention, the method includes changing **addiction**-related behavior of a mammal suffering from **addiction** to drugs of abuse which comprises administering to the mammal an effective amount of a composition that

increases central nervous. . .

DETD The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction** -related behavior of mammals, for example primates, suffering from substance **addiction**.

DETD As used herein, **addiction**-related behavior means behavior resulting from compulsive substance use and is characterized by apparent total dependency on the substance. Symptomatic of. . .

DETD . . . of this drug. See Gawin and Kleber, Medical Management of Cocaine Withdrawal, 6-8 (APT Foundation). As related to cocaine users, **addiction**-related behavior includes behavior associated with all three stages of drug effects.

DETD An effective amount as used herein is that amount effective to achieve the specified result of changing **addiction**-related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD For cocaine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about 100 mg/kg. . .

DETD For nicotine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg or from about 15 mg/kg. . .

DETD For methamphetamine **addiction**, GVG is administered in an amount of from about 15 mg/kg to about 2 g/kg, preferably from about 100 mg/kg. . .

DETD It has unexpectedly been found that intake of GVG alters behavior, and especially **addiction**-related behavior associated with the biochemical changes resulting from intake of drugs of abuse. For example, GVG significantly attenuated cocaine-induced increases. . . or on the delivery of cocaine to the brain locomotor activity. These findings suggest the possible therapeutic utility in cocaine **addiction** of a pharmacologic strategy targeted at the GABAergic neurotransmitter system, a system distinct from but functionally linked to the DA. . .

DETD . . . the mammal may be addicted to ethanol and cocaine, in which case the present invention is particularly suited for changing **addiction**-related behavior of the mammal by administering an effective amount of GVG.

DETD As previously stated, an effective amount as used herein is that amount effective to achieve the specified result of changing **addiction** -related behavior of the mammal. It is an amount which will diminish or relieve one or more symptoms or conditions resulting. . .

DETD . . . together, these data indicate that drugs selectively targeted at the GABAergic system can be beneficial for the treatment of cocaine **addiction**. More specifically, GVG-induced GABA-T inhibition, which produces an increase in extracellular brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine **addiction**.

DETD The phenomenon of sensitization is observed with virtually all drugs of **addiction**. Sensitization is believed to play a role in the etiology of **addiction**. In this example, the effect of saline and 150 mg/kg i.p. of GVG on the expression of cocaine-induced stereotypic behavior. . .

DETD . . . known that non-pharmacologic factors, in addition to pharmacologic ones, play a role in mediating the incentive value of drugs of **addiction** (Jarvik and Henningfield, 1988). In fact, it has been demonstrated clinically that in detoxified addicts, exposure to stimuli that were. . .

DETD . . . be inhibiting other neurotransmitters that either modulate DA directly or are themselves involved in mediating the effects of drugs of **addiction**. Further studies designed to assess the multiple effects of GVG on other neurotransmitters are ongoing.

DETD . . . extracellular brain GABA levels, represents an effective drug

and novel strategy for the treatment of cocaine, nicotine, methamphetamine and ethanol **addiction**.

DETD . . . N. D., Fowler, J. S., Kushner, S. A., Brodie, J. D. (1998) A novel strategy for the treatment of cocaine **addiction**. Synapse, 30: 119-129.

DETD O'Brien, C. P., Childress, A. R., McLellan, A. T., Ehrman, R. (1992) A learning model of **addiction**,. In: Addictive States, O'Brien, C. P. and Jaffe, J. H., (eds), Raven Press, New York, pp. 157177.

DETD Wikler, A. (1965) Conditioning factors in opiate **addiction** and relapse. In: Narcotics, Kassenbaum, G. G. and Wilner, D. I. (eds), McGraw-Hill, New York, pp. 85-100.

CLM What is claimed is:

1. A method for changing **addiction**-related behavior of a primate suffering from **addiction** to alcohol which comprises administering to a primate a composition including gamma vinylGABA (GVG) in an amount sufficient to diminish,. . .

5. The method of claim 1, wherein said **addiction** related behavior is conditioned place preference.

6. A method for changing **addiction**-related behavior of a primate suffering from **addiction** to alcohol which comprises administering to a primate a composition including gama vinylGABA (GVG) in an amount sufficient to attenuate. . .

8. A method of ameliorating effects of alcohol **addiction** which comprises administering to a primate a composition including gamma vinylGABA (GVG) in an amount sufficient to reduce alcohol dependency. . .

13. A method for changing **addiction**-related behavior of a mammal suffering from **addiction** to alcohol which comprises administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically acceptable salt. . .

16. The method of claim 13, wherein said **addiction** related behavior is conditioned place preference.

17. A method for reducing probability of relapse in a mammal after withdrawal from alcohol **addiction**, said method comprising the administration of a composition including gamma vinyl GABA (GVG).

IT 99-66-1, Valproic acid 591-81-1, .gamma.-Hydroxybutyric acid 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, .gamma.-VinylGABA 74046-07-4 77162-51-7 77337-76-9, Acamprosate 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of addiction and addiction-related behavior)

L6 ANSWER 11 OF 12 USPATFULL on STN
AN 2001:160986 USPATFULL
TI Use of sulfamate derivatives for treating impulse control disorders
IN McElroy, Susan L., Cincinnati, OH, United States
PI US 2001023254 A1 20010920
US 6323236 B2 20011127
AI US 2000-506991 A1 20000218 (9)
DT Utility
FS APPLICATION
LREP FROST BROWN TODD, LLC, 2200 PNC CENTER, 201 E. FIFTH STREET, CINCINNATI, OH, 45202
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 933
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Impulse Control Disorders (ICD's) are characterized by harmful behaviors

performed in response to irresistible impulses. The essential feature of an ICD is the failure to resist an impulse, drive, or temptation and to perform an act that is harmful to the person or to others. The present invention comprises methods for the treatment or prevention of ICD's using a class of sulfamates of the following formula: ##STR1##

wherein X is CH.sub.2 or oxygen, and R.sub.1, R.sub.2, R.sub.3, R4 and R.sub.5 are as herein defined. Further, pharmaceutical compositions containing a compound of formula (I) as well as methods for their use and intermediates form part of the present invention are also disclosed.

SUMM [0101] III. Treatment of nicotine **addiction**/smoking cessation with bupropion (ZYBAN), serotonin reuptake inhibitors, nicotine patches and gum, and other antidepressants.

CLM What is claimed is:

11. The method of claim 1 wherein the Impulse Control Disorder is a nicotine **addiction** condition and the compound is used in conjunction with one or more other drug compounds selected from the group consisting. . .

13. The method of claim 1 wherein the Impulse Control Disorder is a behavioral **addiction** condition and the compound is used in conjunction with one or more other drug compounds selected from the group consisting. . .

14. The method of claim 1 wherein the Impulse Control Disorder is a paraphilias/sexual **addiction** condition and the compound is used in conjunction with one or more other drug compounds selected from the group consisting. . .

IT **97240-79-4** 152191-98-5 152191-99-6 152192-00-2
152192-01-3 152192-02-4 152192-03-5 152192-04-6 152192-05-7
152192-06-8 152192-07-9 152192-09-1 152192-10-4 152192-11-5
152192-12-6 152192-13-7 152192-14-8 152192-15-9 152192-16-0
152192-17-1 152192-18-2 152192-19-3 154929-08-5 171241-15-9
(sulfamate derivs. for treatment of impulse control disorders)

L6 ANSWER 12 OF 12 USPATFULL on STN
AN 2000:54151 USPATFULL
TI Treatment of **addiction** and **addiction**-related behavior
IN Dewey, Stephen L., Manorville, NY, United States
Brodie, Jonathan D., Cos Cob, CT, United States
Ashby, Jr., Charles R., Miller Place, NY, United States
PA Brookhaven Science Associates LLC, Upton, NY, United States (U.S. corporation)
PI US 6057368 20000502
AI US 1998-129253 19980805 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: MacMillan, Keith D.
LREP Bogosian, Margaret C.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 1244
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction** -related behavior of a primate suffering from substance **addiction**. The method includes administering to a primate an effective amount of a pharmaceutical composition including gamma vinylGABA. The present invention also provides a method of treatment of nicotine **addiction** by treating a patient with an effective amount of a composition including gamma vinylGABA.
TI Treatment of **addiction** and **addiction**-related

behavior

AB The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction** -related behavior of a primate suffering from substance **addiction**. The method includes administering to a primate an effective amount of a pharmaceutical composition including gamma vinylGABA. The present invention also provides a method of treatment of nicotine **addiction** by treating a patient with an effective amount of a composition including gamma vinylGABA.

SUMM This invention relates to the use of an irreversible inhibitor of GABA-transaminase for the treatment of substance **addiction** and modification of behavior associated with substance **addiction**. Substance **addiction**, such as drug abuse, and the resulting **addiction**--related behavior are enormous social and economic problems that continue to grow with devastating consequences.

SUMM Substance **addiction** can occur by use of legal and illegal substances. Nicotine, cocaine, and other addictive substances are readily available and routinely. . .

SUMM . . . presumptive link between cocaine's addictive liability and the DA reward/reinforcement circuitry of the forebrain, many pharmacologic strategies for treating cocaine **addiction** have been proposed.

SUMM Accordingly, there is still a need in the treatment of **addiction** to drugs of abuse to provide new methods which can relieve a patient's craving by changing the pharmacological actions of. . .

SUMM The present invention, which addresses the needs of the prior art, provides methods for treating substance **addiction** and changing **addiction**-related behavior of a primate suffering from substance **addiction** by administering to the primate an effective amount of a pharmaceutical composition including gamma vinylGABA (GVG). The amount of GVG. . .

SUMM In a preferred embodiment, the present invention provides a method of eliminating the effects of nicotine **addiction** by treating a patient with an effective amount of a composition including GVG. When treating the effects of nicotine **addiction** the amount of GVG present in the pharmaceutical composition is preferably from about 75 mg/kg to about 150 mg/kg.

SUMM As a result of the present invention, methods of reducing substance **addiction** and changing **addiction**-related behavior are provided which are based on a pharmaceutical composition which is not itself addictive, yet is highly effective in ameliorating the **addiction** and the addictive behavior of addicted patients. The pharmaceutical composition useful for the method of the present invention inhibits or. . .

DETD The present invention provides a highly efficient method for treating substance **addiction** and for changing **addiction** -related behavior of primates suffering from substance **addiction** .

DETD As used herein, **addiction**-related behavior means behavior resulting from compulsive substance use and is characterized by apparent total dependency on the substance. Symptomatic of. . .

DETD . . . effects of cocaine. See Gawin and Kleber, Medical Management of Cocaine Withdrawal, 6-8 (APT Foundation). As related to cocaine users, **addiction**-related behavior includes behavior associated with all three stages of drug effects.

DETD It has unexpectedly been found that intake of GVG alters behavior, and especially **addiction**-related behavior associated with the biochemical changes resulting from intake of drugs of abuse. For example, GVG significantly attenuated cocaine-induced increases. . . or on the delivery of cocaine to the brain locomotor activity. These findings suggest the possible therapeutic utility in cocaine **addiction** of a pharmacologic strategy targeted at the GABAergic neurotransmitter system, a system distinct from but functionally linked

to the DA. . .

DETD . . . together, these data indicate that drugs selectively targeted at the GABAergic system can be beneficial for the treatment of cocaine **addiction**. More specifically, GVG-induced GABA-T inhibition, which produces an increase in extracellular brain GABA levels, represents an effective drug and novel strategy for the treatment of cocaine **addiction**.

CLM What is claimed is:
1. A method for changing **addiction**-related behavior of a primate suffering from **addiction** to cocaine which comprises administering to a primate a composition including gamma vinyl GABA (GVG) in an amount sufficient to. . .
5. The method of claim 1, wherein said **addiction** related behavior is conditioned place preference.

6. A method for changing **addiction**-related behavior of a primate suffering from **addiction** to cocaine which comprises administering to a primate a composition including gama vinyl GABA (GVG) in an amount sufficient to. . .

IT 99-66-1, Valproic acid 591-81-1, .gamma.-Hydroxybutyric acid 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, .gamma.-VinylGABA 74046-07-4 77162-51-7 77337-76-9, Acamprosate 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of addiction and addiction-related behavior)

=> d his

(FILE 'HOME' ENTERED AT 09:05:26 ON 30 JUL 2003)

FILE 'REGISTRY' ENTERED AT 09:05:33 ON 30 JUL 2003
L1 0 S TOPIRAMINE/CN
L2 1 S TOPIRAMATE/CN

FILE 'USPATFULL' ENTERED AT 09:07:31 ON 30 JUL 2003
L3 99 S 97240-79-4/RN
L4 0 S L3 AND ADICT?
L5 0 S L3 AND ADICTION
L6 12 S L3 AND ADDICTION

=> s l3 and substance(w) abuse
265664 SUBSTANCE
14639 ABUSE
968 SUBSTANCE(W) ABUSE
L7 8 L3 AND SUBSTANCE(W) ABUSE

=> d l7 1-17 bib, ab, kwic

L7 ANSWER 1 OF 8 USPATFULL on STN
AN 2003:123417 USPATFULL
TI Topiramate sodium trihydrate
IN Almarsson, Orn, Shrewsbury, MA, United States
Remenar, Jules, Framingham, MA, United States
Peterson, Matthew L., Framingham, MA, United States
PA Transform Pharmaceuticals, Inc., Lexington, MA, United States (U.S. corporation)
PI US 6559293 B1 20030506
AI US 2002-232589 20020903 (10)
PRAI US 2002-406974P 20020830 (60)
US 2002-380288P 20020515 (60)
US 2002-356764P 20020215 (60)

DT Utility
FS GRANTED
EXNAM Primary Examiner: Wilson, James O.; Assistant Examiner: McIntosh, Traviss C.
LREP Pennie & Edmonds LLP
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 1869
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention encompasses novel salts of topiramate, and pharmaceutically acceptable polymorphs, solvates, hydrates, dehydrates, co-crystals, anhydrous, or amorphous forms thereof, as well as pharmaceutical compositions and pharmaceutical unit dosage forms containing the same. In particular, the invention encompasses pharmaceutically acceptable salts of topiramate, including without limitation topiramate sodium, topiramate lithium, topiramate potassium, or polymorphs, solvates, hydrates, dehydrates, co-crystals, anhydrous, and amorphous forms thereof. The invention further encompasses novel co-crystals or complexes of topiramate, as well as pharmaceutical compositions comprising them. The invention also encompasses methods of treating or preventing a variety of diseases and conditions including, but not limited to, seizures, epileptic conditions, tremors, cerebral function disorders, obesity, neuropathic pain, affective disorders, tobacco cessation, migraines, and cluster headache.
SUMM . . . deficit disorder, attention deficit disorder with hyperactivity, compulsive or obsessive-compulsive disorder, narcolepsy, premenstrual syndrome, chronic fatigue syndrome, seasonal affective disorder, **substance abuse** or addiction, nicotine addiction or craving, and obesity or weight gain.
IT **97240-79-4**, Topiramate
(prepn. of topiramate sodium trihydrate as antiepileptic agents)

L7 ANSWER 2 OF 8 USPATFULL on STN
AN 2003:89412 USPATFULL
TI Treatment of addiction and addiction-related behavior
IN Dewey, Stephen L., Manorville, NY, United States
Brodie, Jonathan D., Cos Cob, CT, United States
Ashby, Jr., Charles R., Miller Place, NY, United States
PA Brookhaven Science Associates, Upton, NY, United States (U.S. corporation)
PI US 6541520 B1 20030401
AI US 1998-209952 19981211 (9)
RLI Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998
Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, now patented, Pat. No. US 6057368, issued on 2 May 2000
DT Utility
FS GRANTED
EXNAM Primary Examiner: Ponnaluri, Padmashri
LREP Bogosian, Margaret C.
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 2395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a highly efficient method for treating substance addiction and for changing addiction-related behavior of a mammal suffering from substance addiction. The method includes administering to a mammal an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. The present invention also provides a method of treatment of cocaine, morphine, heroin, nicotine, amphetamine, methamphetamine, or ethanol addiction by treating a mammal

with an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. In one embodiment, the method of the present invention includes administering to the mammal an effective amount of a composition which increases central nervous system GABA levels wherein the effective amount is sufficient to diminish, inhibit or eliminate behavior associated with craving or use of drugs of abuse. The composition includes GVG, gabapentin, valproic acid, progabide, gamma-hydroxybutyric acid, fengabine, cetylGABA, topiramate or tiagabine or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof.

DETD Gardner, E. L. (1997) Brain reward mechanisms in **Substance Abuse**: A Comprehensiove Textbook, 3rd edn., eds. Lowinson, J. H., Ruiz, P., Millmna, R. B. & Langrod, J. G., 51-85 (Williams. . .

IT 99-66-1, Valproic acid 591-81-1, .gamma.-Hydroxybutyric acid 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, .gamma. VinylGABA 74046-07-4 77162-51-7 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine (treatment of drug addiction and addiction-related behavior with .gamma. vinylGABA and related compds.)

L7 ANSWER 3 OF 8 USPATFULL on STN

AN 2002:310959 USPATFULL

TI Compounds and methods for the treatment of post traumatic stress disorder

IN Berlant, Jeffrey, 2274 S. Swallowtail La., Boise, ID, United States 83706

PI US 6486198 B1 20021126
WO 2000072841 20001207

AI US 2002-979821 20020311 (9)
WO 2000-US14593 20000526
20020311 PCT 371 date

PRAI US 1999-136449P 19990528 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Krass, Frederick

LREP Christensen O'Connor Johnson Kindness PLLC

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 653

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The application relates to the use of topiramate and related sulfamates for the treatment and/or prophylaxis of post traumatic stress disorder (PTSD).

DETD . . . in non-hallucinatory, non-bipolar patients (14.+-.16.3 years). There was no significant association, however, between duration of symptoms and response to topiramate. **Substance abuse**, whether past or current at the time of initiation of topiramate, was present in 40% (14/35) of patients. Comorbid mood. . .

DETD . . . 15.8 16.3
(range) (0- (0- (1- (2-38) (22-35)
45) 45) 45)
Other
diagnoses
(N)
Bipolar 10 8 0 8 2
disorder
Major 20 15 15 0 5
depressive
disorder
Substance abuse (N)

Current 2 1 1 0 1
Past 12 8 5 3 4
IT **97240-79-4**, Topiramate
(compds. and methods for the treatment of post traumatic stress disorder)

L7 ANSWER 4 OF 8 USPATFULL on STN
AN 2002:157617 USPATFULL
TI Treatments for neurogenetic disorders, impulse control disorder, and wound healing
IN Shapira, Nathan Andrew, Gainesville, FL, UNITED STATES
Lessig, Mary Catherine, Gainesville, FL, UNITED STATES
Driscoll, Daniel John, Gainesville, FL, UNITED STATES
PI US 2002082222 A1 20020627
AI US 2001-997447 A1 20011130 (9)
PRAI US 2000-250113P 20001130 (60)
DT Utility
FS APPLICATION
LREP SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, 2421 N.W. 41ST STREET, SUITE A-1, GAINESVILLE, FL, 326066669
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 13 Drawing Page(s)
LN.CNT 1196
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The subject invention provides methods and compositions for the treatment of neurogenetic disorders, particularly DSM-IV impulse control disorders such as intermittent explosive disorder, kleptomania, pyromania, pathologic gambling, trichotillomania, and other impulse control disorders such as compulsive buying and problematic Internet use. In a preferred embodiment, the subject invention provides methods for treating or controlling symptoms associated with ADHD or PWS comprising the administration of therapeutically effective amounts of compositions containing compounds of the formulas I-V. In another embodiment, the subject invention provides for methods of promoting wound healing comprising the administration of a therapeutically effective amount of a composition comprising the compounds of formulas I-V. Compositions may administered to a wound site via a salve, ointment, or as a component of a bandage or bioadhesive applied to the site of injury. The invention also provides therapeutically effective compositions comprising one or more of the compounds of formulas I-V.
DETD . . . included: clinically significant suicidality or homicidality; current or recent (within 6 months of the start of topiramate) DSM-IV diagnosis of **substance abuse** or dependence; a clinically unstable disease that could interfere with treatment or assessment of PWS; treatment with any drug that. . .
IT **97240-79-4**, Topiramate
(topiramate and other compds. for the treatment of neurogenetic disorders, impulse control disorders, and wound healing)

L7 ANSWER 5 OF 8 USPATFULL on STN
AN 2002:122674 USPATFULL
TI Treatment of PCP addiction and PCP addiction-related behavior
IN Dewey, Stephen L., Manorville, NY, United States
Brodie, Jonathan D., Cos Cob, CT, United States
Ashby, Jr., Charles R., Miller Place, NY, United States
PA Brookhaven Science Associates, LLC, Upton, NY, United States (U.S. corporation)
PI US 6395783 B1 20020528
AI US 2000-694040 20001023 (9)
DT Utility
FS GRANTED

EXNAM Primary Examiner: Spivack, Phyllis G.
LREP Bogosian, Margaret C.
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 974
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for changing addiction-related behavior of a mammal suffering from addiction to phencyclidine (PCP). The method includes administering to the mammal an effective amount of gamma vinylGABA (GVG) or a pharmaceutically acceptable salt thereof, or an enantiomer or a racemic mixture thereof, wherein the effective amount is sufficient to diminish, inhibit or eliminate behavior associated with craving or use of PCP.
DETD Gardner, E. L. (1997) Brain reward mechanisms in **Substance Abuse**: A Comprehensive Textbook, 3rd end., eds. Lowinson, J. H., Ruiz, P., Millmna, R. B. & Langrod, J. G., 51-85 (Williams. . .
IT 99-66-1, Valproic acid 591-81-1, .gamma.-Hydroxybutyric acid 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, .gamma.-VinylGABA 77337-76-9, Acamprosate 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of PCP addiction and PCP addiction-related behavior)

L7 ANSWER 6 OF 8 USPATFULL on STN
AN 2002:78788 USPATFULL
TI Treatment of addiction and addiction-related behavior
IN Dewey, Stephen L., Manorville, NY, UNITED STATES
Brodie, Jonathan D., Cos Cob, CT, UNITED STATES
Ashby,, Charles R., JR., Miller Place, NY, UNITED STATES
PI US 2002042446 A1 20020411
AI US 2001-933157 A1 20010820 (9)
RLI Continuation-in-part of Ser. No. US 2001-776117, filed on 2 Feb 2001, PENDING Continuation-in-part of Ser. No. US 1998-209952, filed on 11 Dec 1998, PENDING Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998, PENDING Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, GRANTED, Pat. No. US 6057368
DT Utility
FS APPLICATION
LREP Margaret C. Bogosian, Brookhaven National Laboratory, Bldg. 475D, P.O. Box 5000, Upton, NY, 11973-5000
CLMN Number of Claims: 96
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 3009
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the use of a composition that increases central nervous system GABA levels in a mammal, for the treatment of addiction to drugs of abuse and modification of behavior associated with addiction to drugs of abuse in said mammal.
SUMM . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
SUMM . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
DETD . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
DETD . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
DETD . . . characterization of nicotine induced conditioned place

preference. Pharmacol. Biochem. Behav., 22: 237-241. Gardner, E. L. (1997) Brain reward mechanisms in **Substance Abuse**: A Comprehensive Textbook, 3rd end., eds. Lowinson, J. H., Ruiz, P., Millmna, R. B. & Langrod, J. G., 51-85 (Williams. . .

IT 68506-86-5, .gamma.-VinylGABA **97240-79-4**, Topiramate
(treatment of addiction and addiction-related behavior with agents increasing central nervous system GABA levels)

L7 ANSWER 7 OF 8 USPATFULL on STN
AN 2002:67272 USPATFULL
TI Treatment of addiction and addiction-related behavior
IN Dewey, Stephen L., Manorville, NY, UNITED STATES
Brodie, Jonathan D., Cos Cob, CT, UNITED STATES
Ashby, Charles R., JR., Miller Place, NY, UNITED STATES
PI US 2002037925 A1 20020328
AI US 2001-776117 A1 20010202 (9)
RLI Continuation-in-part of Ser. No. US 1998-209952, filed on 11 Dec 1998, PENDING Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998, PENDING Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, GRANTED, Pat. No. US 6057368
DT Utility
FS APPLICATION
LREP Margaret C. Bogosian, Brookhaven National Laboratory, Bldg. 475D, P.O. Box 5000, Upton, NY, 11973-5000
CLMN Number of Claims: 96
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 2728
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the use of a composition that increases central nervous system GABA levels in a mammal, for the treatment of addiction to drugs of abuse and modification of behavior associated with addiction to drugs of abuse in said mammal.
SUMM . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
SUMM . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
DETD . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
DETD . . . on this unique biochemical fingerprint, drugs that attenuate or abolish this response may be quite effective for the treatment of **substance abuse**.
IT 99-66-1, Valproic Acid 591-81-1, .gamma.-Hydroxybutyric acid 1134-47-0, Baclofen 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, Vigabatrin 77337-76-9, Acamprosate 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of drug addiction and addiction-related behavior using compns. that increase central nervous system GABA in relation to effect on nucleus accumbens dopamine)

L7 ANSWER 8 OF 8 USPATFULL on STN
AN 2001:215084 USPATFULL
TI Treatment of addiction to ethanol and addictive-related behavior
IN Dewey, Stephen L., Manorville, NY, United States
Brodie, Jonathan D., Cos Cob, CT, United States
Ashby, Jr., Charles R., Miller Place, NY, United States
PA Brookhaven Science Associates, Upton, NY, United States (U.S. corporation)

PI US 6323239 B1 20011127
AI US 2000-635578 20000809 (9)
RLI Continuation of Ser. No. US 1998-209952, filed on 11 Dec 1998
Continuation-in-part of Ser. No. US 1998-189166, filed on 9 Nov 1998
Continuation-in-part of Ser. No. US 1998-129253, filed on 5 Aug 1998, now patented, Pat. No. US 6057368, issued on 2 May 2000
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jarvis, William R. A.
LREP Bogosian, Margaret C.
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 2326
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a highly efficient method for treating alcohol addiction and for changing addiction-related behavior of a mammal suffering from alcohol addiction. The method includes administering to a mammal an effective amount of gamma vinylGABA or a pharmaceutically acceptable salt thereof. In one embodiment, the method of the present invention includes administering to the mammal an effective amount of a composition which increase central nervous system GABA levels wherein the effective amount is sufficient to diminish, inhibit or eliminate behavior associated with craving or use of alcohol.

DETD Gardner, E. L. (1997) Brain reward mechanisms in **Substance Abuse**: A Comprehensiove Textbook, 3rd edn., eds. Lowinson, J. H., Ruiz, P., Millmna, R. B. & Langrod, J. G., 51-85 (Williams. . .

IT 99-66-1, Valproic acid 591-81-1, .gamma.-Hydroxybutyric acid 34562-99-7, CetylGABA 60142-96-3, Gabapentin 62666-20-0, Progabide 68506-86-5, .gamma.-VinylGABA 74046-07-4 77162-51-7 77337-76-9, Acamprosate 80018-06-0, Fengabine **97240-79-4**, Topiramate 115103-54-3, Tiagabine
(treatment of addiction and addiction-related behavior)